The Climate Change Challenge

"Surveyors are the custodians of an enabling technology that is critically important to our future. Surveyors should take a leading role, not only in monitoring climate change, but in explaining it to the broader public".

I welcome and agree on this appeal stated by Tim Flannery, global expert on climate change, when giving the keynote address at the recent FIG Congress in Sydney 11-16 April 2010.

Surveyors are experts in measuring and mapping systems for monitoring environmental change. They should use this expertise to explain about the purpose and need for monitoring even minor climate related changes and thereby take a leading role in explaining to the wider public what climate change is all about.

Surveyors are also experts in land administration and management - they are Land Professionals. So next to explaining climate change the surveyors should also take a leading role in addressing the climate change challenge in the wider context of sustainable land governance.

The key challenges of the new millennium are clearly listed already. They relate to climate change; food shortage; urban growth; environmental degradation; and natural disasters. Importantly, these issues all relate to governance and management of land.

The challenges of food shortage, environmental degradation and natural disasters are to a large extent caused by the overarching challenge of climate change, while the rapid urbanisation is a general trend that in itself has a significant impact on climate change. Measures for adaptation to climate change must be integrated into strategies for poverty reduction to ensure sustainable development and for meeting the Millennium development Goals (MDGs).

Adaptation to climate change can be achieved to a large extent through building sustainable and spatially enabled land administration systems. This should enable control of access to land the use of land. The systems should identify all prone areas subject to sea-level rise, drought, flooding, fires, etc. as well as measures and regulations to prevent the impact of predicted climate change.

Key policy issues to be addressed should relate to protecting the citizens by avoiding concentration of population in vulnerable areas and improving resilience of existing ecosystems to cope with the impact of future climate change. Measures such as building codes may be essential in some areas to avoid damage e.g. in relation to flooding and earthquakes. Issues may also relate to plans for replacement existing settlements as an answer to climate change impacts.

Urbanisation is another major change that is taking place globally. The urban global tipping point was reached in 2007 when over half of the world's population was living in urban areas; around 3.3 billion people. Urbanisation is also having a very significant impact on climate change. Cities are where climate change measures will either succeed or fail. Rapid urbanisation is setting the greatest test for Land Professionals in the application of land governance to support and achieve the MDGs.

The linkage between climate change adaptation and sustainable development should be self evident but is not well understood by the public in general. My key message therefore is that Land Professionals should take a leading role in explaining this linkage to the wider public. This should also ensure that the land management perspective attracts high-level political support and recognition.



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